Important Advances in Clinical Medicine

Epitomes of Progress—Ophthalmology

The Scientific Board of the California Medical Association presents the following inventory of items of progress in ophthalmology. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist the busy practitioner, student, research worker or scholar to stay abreast of these items of progress in ophthalmology which have recently achieved a substantial degree of authoritative acceptance, whether in his own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on Ophthalmology of the California Medical Association and the summaries were prepared under its direction.

Reprint requests to: Division of Scientific and Educational Activities, California Medical Association, 731 Market St., San Francisco, CA 94103

Herpes Simplex Keratitis

HERPES SIMPLEX KERATITIS is basically an epithelial disease of the cornea that might be considered the counterpart of the labial fever blister. In most cases it is a self-limited disease requiring four to ten days for spontaneous cure. Resolution of the epithelial lesions (such as dendritic ulcer) may be hastened by simple removal of the affected epithelium on a dry cotton swab or by the local use of antiviral agents such as idoxuridine, adenine arabinoside or the newly developed trifluorothymidine.

Herpetic keratitis becomes a serious problem when it involves the corneal stroma, becomes associated with iridocyclitis or when the frequency of recurrences of the epithelial lesions is so great that the patient is incapacitated for useful work. The causative virus Herpesvirus hominis has recently been shown to reside in the trigeminal ganglion between attacks. Therefore, a reservoir for the latent infection always exists within the cranium, and an outbreak of recurrent disease may be provoked at any time after the initial infection by one of a number of triggers. The commonest of these are fever, exposure to ultraviolet light, trauma and emotional stress. These triggers are important to recognize, because they may be avoided by patients subject to frequent recurrences of herpetic keratitis. The early use of aspirin in respiratory infections may prevent fever, just as the use of a broad-rimmed hat or sunglasses may prevent damage from ultraviolet exposure.

The use of corticosteroids by either local or systemic application is contraindicated in herpetic epthelial keratitis because this form of treatment may contribute to the establishment of stromal disease of the cornea and, possibly, to the invasion of deeper structures of the eye such as the uvea.